### Icon Medical Solutions, Inc.

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**DATE:** 11/13/16

**IRO CASE #:** 

#### **DESCRIPTION OF THE SERVICE OR SERVICES IN DISPUTE:**

23700 Left Shoulder Manipulation Under Anesthesia

## A DESCRIPTION OF THE QUALIFICATIONS FOR EACH PHYSICIAN OR OTHER HEALTH CARE PROVIDER WHO REVIEWED THE DECISION:

The reviewer is certified by the American Board of Orthopedic Surgery with over 18 years of experience, with a primary practice of Orthopedics and a secondary practice of Pediatric Orthopedics.

#### **REVIEW OUTCOME:**

Upon independent review, the reviewer finds that the previous adverse determination/adverse determinations should be:

□ Upheld (Agree)

Provide a description of the review outcome that clearly states whether medical necessity exists for <u>each</u> of the health care services in dispute.

#### PATIENT CLINICAL HISTORY [SUMMARY]:

The claimant is a male who sustained injuries to his left shoulder, left wrist, abdomen, and right leg on XXXX, when he was xxxxxxx at his place of employment.

XXXX: OV. Patient underwent treatment with activity modification, NSAID's, pain management, po steroids, and therapy. Pt had an allergic reaction to PO STEROIDS. Left Shoulder MRI done on XXXX shows partial thickness tear of RC tendon, subacromial impingement, hypertrophic AC joint change causing subacromial impingement. Pt presents today with complaint of throbbing shoulder pain and limited function. Pain scale at rest is 8/10. More pain with overhead reaching. Pt reports no improvement with conservative treatment. Diagnosis 1. Rotator Cuff Rupture. 2. Shoulder Region DIS OT. 3. Joint Derangement. 4. Enctr Therapy Drug Monitor. Patient is allergic to po steroids. Patient will benefit from left shoulder arthroscopy with rotator cuff debridement, possible repair, subacromial decompression, and distal clavicle resection.

XXXX: OV. Tenderness at anterior and lateral aspect of the shoulder joint. + O'Brien's test. + Yergason's test. + Speed's test. Sensitive to light touch. Waiting approval for surgery.

XXXX: OV. No changes. Patient remains resistant to 5-6 months conservative therapy. Awaiting surgery approval. Meds: Ibuprofen 800mg and Hydrocodone 5mg.

XXXX: OV. Patient is post op follow-up today. S/P left shoulder arthroscopy, RC repair on XXXX. Doing well, will start PT 3/W for 6 weeks.

XXXX: OV. Pt c/o pain. Pt still in PT. Slow improvement post op. Continue rehab to improve shoulder function/ROM.

XXXX: OV. Patient c/o increased sharp pain. Medications include Ibuprofen 800 mg and Hydrocodone 5mg. + shoulder stiffness. Abduction: 80 degrees. ER 50 degrees. IR: R-S1 level. Patient had a cortisone steroid injection in his It shoulder today. Patient will benefit from left shoulder manipulation under anesthesia with arthroscopic lysis of adhesions. Give Norco 10/325mg PRN severe pain.

XXXX: OP Report. Preoperative Dx- Left shoulder stiffness/adhesions. Postoperative Dx- same. Operation- Left shoulder arthroscopy/lysis of adhesions/debridement, amniotic graft placement. MUA. No complications.

XXXX: OV. Post-op visit. Pt reports less swelling/pain. Start PT 3/w for 6 weeks.

XXXX: OV. Patient reports burning pain of the left shoulder. Worsened with therapy and movement of the shoulder. Will obtain CT of the left shoulder with contrast to complete evaluation.

XXXX: OV. Pt reports still having severe sharp/burning pain on the left shoulder. Norco helps with this. Left Shoulder Ct Scan showed post-surgical changes from prior RC cuff repair, small 2mm partial thickness articular surface tear of the supraspinatus posterior fibers with interstitial extension into the infraspinatus. + tenderness at anterior and lateral aspect of the shoulder joint. Forward elevation: R-180, L-80. Abduction: R-160, L-80. ER: R-80, L-30. IR: R-L2 level, L-55. + impingement sign. + O'Brien's Test. Improved left shoulder ROM, but still in pain. Left shoulder PT. Left shoulder steroid injection today.

XXXX: PT Notes. Patient reports he has started hearing a cracking noise from left shoulder with movement overhead. No significant progress noted with left shoulder strength, full PROM in all planes is achieved with mod discomfort at end range, mod crepitus and crackling noted with left shoulder motions past 90' in flex and abd.

XXXX: PT Notes. Pt reports noticing two small bumps on lt shoulder, which are painful to the touch. Lt shoulder full PROM continues to be achieved during manual stretches, AAROM continues to improve, however, AROM continues to be limited, subjective reports of tenderness areas on lt shoulder area verified, which elicited mod discomfort when palpitated.

XXXX: PT Notes. Pt reports It shoulder pain was intense last night and he did not have a good night's sleep. Improved tolerance to PRE's as It shoulder strength has progressed, full PROM achieved with pain at end range in all planes, AROM with min progress noted.

XXXX: PT Notes. Pt is s/p L shoulder RCR on XXXX. He has had previous PT, but pain and weakness continued. He reports he has "balls on the top of his left shoulder that hurt when pressed". He reports his motion and strength are the same. Pt has made minimal progress with AROM. C/o numbness L  $3^{rd}$ ,  $4^{th}$ , and  $5^{th}$  digit. He has slight increase with MMT. Current Status: CJ, at least 20% but < 40% impaired, limited or restricted. Pt has increased AROM and strength slightly with slow progress. PROM can be achieved in full with patient c/o pain. Patient is in need of AROM and strength to return to prior level.

XXXX: OV. Reports doing better with It shoulder pain. Reports small lump on the shoulder. + shoulder stiffness. +tenderness at anterior and lateral aspect of the shoulder joint. + 1cm by 1cm mobile tender lump above the clavicle. Joint motion: forward elevation: R-180, L-120. Abduction: R-160, L-120. ER: R-80, L-60. IR: R-L2 level, L-S1. + impingement sign. + O'Brien's Test.

XXXX: OV. Pain scale at rest today is 5/10, worse with overhead reaching. CT Left Shoulder: no full thickness tear. Still in pain/stiffness. Adhesive capsulities. Pt would benefit from left shoulder manipulation under anesthesia. ++shoulder stiffness. + tenderness at anterior and lateral aspect of the shoulder joint. Joint motion: forward elevation: R-180, L-90. Abduction: R-160, L-100. ER: R-80, L-50. IR: R-L2 level, L-S1. + impingement sign. + O'Brien's test. Meds include Ibuprofen 800mg and Norco 10-325.

XXXX: UR. Rationale- Attempted peer review with an orthopedic surgeon. There is no documentation of recent PT. Without peer review, I cannot approve the proposed surgery as medically necessary at this time. There is no documentation or recent treatment with oral steroid preparation to break the inflammation cycle or oral anti-

inflammatories or cortisone injection to the subacromial and/or glenohumeral joint, or the setting of formal focused physical therapy. Given the above and without peer review and consistent with evidence-based medicine such as ODG, I cannot approve revision manipulation medically necessary at this time.

XXXX: UR. Rationale- The clinical information submitted for review fails to meet the evidence based guidelines for the requested service. According to the ODG, manipulation under anesthesia is recommended when the patient is refractory to conservative treatment lasting 3 to 6 months with ROM remaining significantly restricted. The submitted documentation indicated that the patient has had recent PT to the left shoulder. However, on the most recent clinical note it was indicated that the patient's abduction was 100 degrees of the left shoulder. Given the submitted documentation did not indicate the patient had any significant or restricted shoulder motion of less than 90 degrees, this request is not substantiated. During my peer to peer call I attempted, I indicated that this request would be submitted as a non-certification without additional supporting documentation.

### ANALYSIS AND EXPLANATION OF THE DECISION INCLUDE CLINICAL BASIS, FINDINGS, AND CONCLUSIONS USED TO SUPPORT THE DECISION:

The previous adverse decision is Upheld. This patient underwent left shoulder arthroscopy with rotator cuff repair in XXXX. He underwent a repeat arthroscopy with lysis of adhesions and MUA in XXXX. The physical therapy notes of XXXX-XXXX note indicated that the patient had full passive motion. Left hand numbness was also documented. The XXXX office note reported 100 degrees of active abduction of the left shoulder. MUA was considered as a treatment option for moderately limitation in active shoulder motion.

The Official Disability Guidelines (ODG) supports manipulation under anesthesia for patients with adhesive capsulitis who have significantly restricted shoulder motion. Significant restriction is defined as abduction less than 90 degrees. Prior to MUA, patient should have completed 3-6 months of physical therapy. This patient has more than 90 degrees of active abduction, which does not meet the ODG requirements for MUA. The XXXX physical therapy notes indicate full passive shoulder motion. Full passive motion is not consistent with adhesive capsulitis. Therefore, the request for left shoulder manipulation under anesthesia (MUA) is considered not medically necessary at this point in time.

# Manipulation under anesthesia (MUA)

Under study as an option in adhesive capsulitis.

See also <u>Surgery for adhesive capsulitis</u>. In other chapters, see the <u>Low Back Chapter</u>, where MUA is not recommended in the absence of vertebral fracture or dislocation; and the <u>Knee Chapter</u>, where MUA is recommended as an option for treatment of arthrofibrosis and/or after total knee arthroplasty, only after a trial (six weeks or more) of conservative treatment, and a single treatment session would then be recommended, not serial treatment sessions.

In cases that are refractory to conservative therapy lasting at least 3-6 months where range-of-motion remains significantly restricted (abduction less than 90°), manipulation under anesthesia may be considered. There is some support for manipulation under anesthesia in adhesive capsulitis, based on consistent positive results from multiple studies, although these studies are not high quality. (Colorado, 1998) (Kivimaki, 2001) (Hamdan, 2003) Manipulation under anesthesia (MUA) for frozen shoulder may be an effective way of shortening the course of this apparently self-limiting disease and should be considered when conservative treatment has failed. MUA may be recommended as an option in primary frozen shoulder to restore early range of movement and to improve early function in this often protracted and frustrating condition. (Andersen, 1998) (Dodenhoff, 2000) (Cohen, 2000) (Othman, 2002) (Castellarin, 2004)

Even though manipulation under anesthesia is effective in terms of joint mobilization, the method can cause iatrogenic intraarticular damage. (<u>Loew, 2005</u>) When performed by chiropractors, manipulation under anesthesia may not be allowed under a state's Medical

Practice Act, since the regulations typically do not authorize a chiropractor to administer anesthesia and prohibit the use of any drug or medicine in the practice of chiropractic. (Sams, 2005) This case series concluded that MUA combined with early physical therapy alleviates pain and facilitates recovery of function in patients with frozen shoulder syndrome. (Ng, 2009) This study concluded that manipulation under anesthesia is a very simple and noninvasive procedure for shortening the course of frozen shoulder, an apparently self-limiting disease, and can improve shoulder function and symptoms within a short period of time, but there was less improvement in post-surgery frozen shoulders. (Wang, 2007) Two lower quality studies have recently provided some support for the procedure. In this study manipulation under suprascapular nerve block and intra-articular local anesthesia shortened the course of frozen shoulder (FS), although it is an apparently self-limiting disease. (Khan, 2009) In this study manipulation under anesthesia combined with arthroscopy was effective for primary frozen shoulder. (Sun, 2011)

Frozen shoulder has a greater incidence, more severe course, and resistance to treatment in patients with diabetes mellitus compared with the general population, but outcomes for diabetic patients with frozen shoulder undergoing treatment with manipulation under general anesthesia (MUA) are the same as patients without diabetes. (Jenkins, 2012) In this case series, treatment of frozen shoulder by MUA led to improvement in shoulder motion and function at a mean 23 years after the procedure. (Vastamäki, 2012)

The latest UK Health Technology Assessment on management of frozen shoulder concludes that there was very little evidence available for MUA and most of the studies identified had limitations. The single adequate study found no evidence of benefit of MUA over home exercise alone. Generalizability is somewhat unclear because of the limited information about previous interventions that participants had received and stage of frozen shoulder. (Maund, 2012) The fastest improvement occurs following the first month after MUA, but 6 months after MUA, shoulder active range of motion remains lower than the uninvolved extremity. (Sokk, 2012) In this study, six months after MUA, endurance time and net impulse remained impaired for the involved shoulder. (Sokk, 2013) According to an Indian study, the efficacy of MUA, injection, and PT are comparable for adhesive capsulitis. (Ghosh, 2012)

It is currently unclear as to whether there is a difference in the clinical effectiveness of an arthroscopic capsular release compared to MUA in patients with recalcitrant idiopathic adhesive capsulitis. The quality of evidence available is low and the data available demonstrate little benefit. A high quality study is required to definitively evaluate the relative benefits of these procedures. (Grant, 2013) According to a systematic review of frozen shoulder treatments, outcomes with MUA are equivocal when compared to other treatment approaches. (Uppal, 2015) This study concluded that the best time for MUA, if non-operative treatment has failed to alleviate pain or limitation of shoulder motion is too cumbersome, might be between 6 and 9 months from the onset of the symptoms. (Vastamäki, 2015)

<b>DECISION:</b>	
	ACOEM- AMERICAN COLLEGE OF OCCUPATIONAL & ENVIRONMENTAL MEDICINE UM KNOWLEDGEBASE
	AHCPR- AGENCY FOR HEALTHCARE RESEARCH & QUALITY GUIDELINES
	DWC- DIVISION OF WORKERS COMPENSATION POLICIES OR GUIDELINES
	EUROPEAN GUIDELINES FOR MANAGEMENT OF CHRONIC LOW BACK PAIN
	INTERQUAL CRITERIA
	MEDICAL JUDGEMENT, CLINICAL EXPERIENCE, AND EXPERTISE IN ACCORDANCE WITH ACCEPTED MEDICAL STANDARDS
	MERCY CENTER CONSENSUS CONFERENCE GUIDELINES
	MILLIMAN CARE GUIDELINES
	ODG- OFFICIAL DISABILITY GUIDELINES & TREATMENT GUIDELINES
	PRESSLEY REED, THE MEDICAL DISABILITY ADVISOR
	TEXAS GUIDELINES FOR CHIROPRACTIC QUALITY ASSURANCE & PRACTICE PARAMETERS
	TEXAS TACADA GUIDELINES
	TMF SCREENING CRITERIA MANUAL
	PEER REVIEWED NATIONALLY ACCEPTED MEDICAL LITERATURE (PROVIDE A DESCRIPTION)
	OTHER EVIDENCE BASED, SCIENTIFICALLY VALID, OUTCOME FOCUSED GUIDELINES (PROVIDE A DESCRIPTION)

A DESCRIPTION AND THE SOURCE OF THE SCREENING CRITERIA OR OTHER CLINICAL BASIS USED TO MAKE THE